

- Narthecium californicum* Baker. n = 13. Oregon, Josephine Co. *W. Roderick*, 1962, JEPS; *W. Roderick*, 1965, JEPS. Counted by M. S. Cave.
- Olivaea leptocarpa* De Jong & Beaman. n = 6. Mexico, Durango, near J. G. Aguilera. *D. C. D. De Jong 1754*, MU; *D. C. D. De Jong 1760*, MU.
- O. tricuspis* Sch.-Bip. ex Benth. n = 6. Mexico, Jalisco, near Acatlan. *D. C. D. De Jong 1687*, MU; Jalisco, near Guadalajara. *D. C. D. De Jong 1688*, MU; State of Mexico, near Toluca. *D. C. D. De Jong 1619*, MU; *D. C. D. De Jong 1650*, MU; State of Mexico, Del Rio. *D. C. D. De Jong 1647*, MU; Nayarit, Tepic. *D. C. D. De Jong 1693*, MU.
- Schoenolirion album* Dur. n = 26. California, Plumas Co. *G. E. See*, 1957, JEPS. Counted by M. S. Cave.
- Spiranthes gracilis* (Bigel.) Beck. n = 15. Florida, Hillsborough Co. *R. W. Long 1168*, USF. Counted by M. S. Cave.
- Stenanthium occidentale* Gray. n = 8. California, Siskiyou Co. *W. Roderick*, 1962, JEPS; *W. Roderick*, 1965, JEPS. Counted by M. S. Cave.
- Tofieldia glutinosa* (Michx.) Pers. ssp. *occidentalis* (Wats.) Hitch. n = 15. Oregon, Josephine Co. *W. Roderick*, 1962, JEPS. Counted by M. S. Cave.
- Veratrum californicum* Dur. n = 16. California, Alpine Co. *W. Roderick*, 1965, JEPS; Eldorado Co. *H. G. Baker*, 1965, JEPS. Counted by M. S. Cave.
- V. fimbriatum* Gray. n = 16. California, Mendocino Co. *W. Roderick*, 1965, JEPS. Counted by M. S. Cave.
- V. insolitum* Jeps. n = 16. California, Siskiyou Co. *W. Roderick*, 1965, JEPS. Counted by M. S. Cave.
- Xerophyllum tenax* (Pursh) Nutt. n = 15. California, Mendocino Co. *W. Roderick*, 1965, JEPS. Counted by M. S. Cave.

REVIEWS

THE HUNT BOTANICAL LIBRARY AND ITS PUBLICATIONS.—The institution known as the Rachel McMasters Miller Hunt Botanical Library is the lengthened shadow of not only Rachel McMasters Miller Hunt but also of its director, George H. M. Lawrence. The history of the Library has been told well in *The Rachel McMasters Miller Hunt Botanical Library* (1961). The Library is a relatively new institution and has been housed in its present location in the penthouse of the Hunt Library on the campus of the Carnegie Institute of Technology in Pittsburgh since 1961. The setting and decor of the penthouse are truly beautiful and are a fitting place for the care and study of Mrs. Hunt's collection of incunabula, rare botanical and horticultural books, botanical prints, letters, manuscripts, and fine bindings.

Mrs. Hunt's interest in botany stemmed from her early girlhood—at the age of six she was given a copy of Mrs. Dana's *How to Know Wildflowers*. With the passing years as Mrs. Hunt acquired more and more rare works she realized that her collection was in many ways unique in North America. Her first steps toward sharing her collection with others resulted in the magnificent two volume *Catalogue of Botanical Books in the Collection of Rachel McMasters Miller Hunt* (1958, 1961). These two volumes deal with 764 works dating from about 1150 through 1800. The *Catalogue* was issued in a limited edition of 750 copies. Volume I was compiled by Jane Quinby, Mrs. Hunt's friend and librarian, and contains chapters by Harold W. Rickett, John F. Fulton, Paul B. Sears, Wilfrid Blunt, and Margaret B. Stillwell: Volume II, which is in two parts, was compiled by Allan Stevenson and contains introductory material prepared by Gordon Dunthorne, John S. Gilmour, and William T. Stearn. The volumes of the *Catalogue* are beautifully done with respect to printing, composition, paper, and binding.

In 1961 Mrs. Hunt's books were moved from the library at the Hunt's residence in Pittsburgh, Elmhurst, to the newly completed Hunt Library. The previous year, Dr. Lawrence had been appointed Director of the Hunt Botanical Library and since that time the Library has expanded its scope and activities to become a most important botanical research center.

The main activity of the Library at present is the *Bibliography Huntiana*, which may be characterized as a new Pritzel. When completed it will be a major bibliographical source in systematic botany, covering the literature from 1730 through 1840 and will comprise 16 quarto volumes. Title pages of books will be reproduced in facsimile. The preparation of *Bibliographia Huntiana* is being done, in keeping with the times, with the aid of computers.

The Library has already published two volumes of *Huntia*, *A Yearbook of Botanical and Horticultural Bibliography* (1964, 1965). *Huntia* contains an interesting series of papers by members of the Library staff and others. Of particular interest to western botanists is a paper entitled *Some Recollections of Percy Train*, by Chester A. Arnold (*Huntia* 2:111-116. 1965).

The collection of portraits of botanists, now numbering several thousand, is the special concern of Theodore W. Bossert. The collection is growing and in time should be the most complete in North America.

The Library has as another of its important functions the periodic exhibition of botanical illustrations. Notable among these have been the exhibition of Redoutéana during August, 1963. The catalogue of the exhibition, *A Catalogue of Redoutéana* (1963), follows the same high standards as the other Library publications.

Another function of the Library is periodic symposia. Those who attended the Adanson Symposium in 1963 will remember it with pleasure. The papers delivered by Jean-Paul Nicolas, Frans Stafleu, William Margadant, Mme. G. Duprat, Peter Sneath, and Théodore Monod were published in two parts entitled, *Adanson, The Bicentennial of Michel Adanson's "Familles des plantes"* (1963, 1965). *Adanson* is the first of the Hunt Monographic Series.

Additional collections in the Library consist of bookplates, examples of fine bindings, letters, and manuscripts. Eventually the Library will be a major depository for letters and thus an important source of material for those interested in historical aspects of botany.

Two works have so far been reproduced in the Hunt Facsimile Series. The first (1963) was L'Héritier de Brutelle's *Sertum Anglicum*. It is indeed a rare book in that only 35 complete copies of the original are known. The book is beautifully executed and includes introductory chapters by Frans Stafleu, John S. Gilmour, C. J. King, L. H. J. Williams, and Wilfrid Blunt. The second (1966) in the Facsimile Series is Walafrid Strabo's *Hortulus* or "The Little Garden." The *Hortulus* is of less interest to professional botanists than *Sertum Anglicum* as it predates Linnean nomenclature by nearly a thousand years. The *Hortulus* was reproduced because "Of all the gardening literature of this and ages past, nothing has survived longer, and little has been extolled more . . . It has survived this long, and should live for more than as long again, not because of gardening innovations, accounts of new plants, or pharmacological discoveries reported in it, but because it is beautiful poetry, because it is full of man's love for the earth and for the plants he grows in it." (forward, p. v).

Perhaps one of the most interesting aspects of the *Hortulus* facsimile is the series of prints by Henry Evans of San Francisco. Twenty-eight of his prints are used to decorate the English translation done by Raef Payne. Henry Evans is certainly among the foremost of contemporary botanical print makers and this is confirmed by the use of specially commissioned prints in the *Hortulus*.

Long before Mr. Evans started making botanical prints he was well known in San Francisco as a bookman, as a printer, and as the proprietor of the Peregrin Press. His botanical prints are not scientific illustrations in the sense of those that dot our technical floras and manuals, but are designed to give an impression of a



FIG. 1. Reproduction of a print of *Scolioopus bigelovii* Torrey, California Fetid Adder's Tongue, made by Henry Evans and reproduced by permission.

particular plant. He is interested in making botanical prints for decorative purposes. Whereas a scientific illustration puts in as many details as possible, Mr. Evans' prints avoid many details to achieve a clear, clean representation. His prints have an open, graceful, and airy character. There is no doubt, however, about their identity, as the reproduction (fig. 1) of *Scolioopus bigelovii* Torrey or California Fetid Adder's Tongue will demonstrate.

All of Mr. Evans' plants are drawn in their natural settings. He believes that the best composition exists in nature and that it should not be tampered with. For him printing is work and as he is more interested in finding a plant, drawing it, and cutting the linoleum block, he limits the number of prints from any one block to 100 and many to less than that number.

A complete set of Henry Evans' prints are among the recent acquisitions of the Hunt Botanical Library and an exhibit of his prints will be held at the Library in November of this year.

The Hunt Botanical Library is a specialized institution performing scholarly functions with both efficiency and taste. As our libraries become more and more crowded we will have to rely increasingly on specialized libraries, for much as we may hate to contemplate the notion, many libraries will not be able to house material as they have been accustomed to in the past. For this purpose, the Hunt Botanical Library serves as an admirable model. It deserves the full support of the botanical community and we should be grateful to its sponsors, director, and staff for their efforts.—JOHN H. THOMAS, Dudley Herbarium, Stanford University.

The Origin of Cultivated Plants. By FRANZ SCHWANITZ. pp. 175. Harvard University Press, Cambridge. 1966. \$4.75.

There is urgent need for a modern treatment of the origin of cultivated plants, patterned after De Candolle's classical work, "The origin of cultivated plants" published in 1886. In spite of the title, Schwanitz' little book of 175 pages evidently was never intended to fulfill this need. Indeed, the accumulated knowledge of the origin of cultivated plants is now so voluminous that it could not be compressed within the covers of a single volume of reasonable length. Furthermore, it is probably beyond the ability or capacity of one individual to treat the subject adequately.

Schwanitz' book was first published in 1955. The present version was translated from German by Gerd von Wahlert and published by Harvard University Press in 1966. Unfortunately, there is no indication that the opportunity for up-dating the text was used to advantage. As a result statements about corn, wheat and perhaps others do not reflect new and significant information about these crops.

The audience for which the book was prepared is not indicated, but it would be useful as supplemental reading for advanced undergraduate and graduate courses in economic botany, origin of cultivated plants, and other courses of like nature. Scientists or laymen whose work is with cultivated crops should find much of interest in the text.

A large portion of the book is devoted to specific examples of the ways in which wild plants differ from their corresponding cultivated forms. This is the most interesting and useful part of the book. Also, the well-known story of the transition of lupine from an essentially wild plant to a cultivated one under the skillful guidance of the German plant breeders, von Sengbusch and his colleagues, is reviewed in detail. The concluding chapter is a good short sketch of some of the highlights in the history of plant breeding.

The unwary reader should be cautioned against some rather serious errors that have crept into the text, most likely as the result of faulty translation. For example on page 5, Correns, de Vries and Tschermak are credited with the "discovery" of the laws of heredity. Obviously it should have been "rediscovery." This error is partially corrected on page 161 (156 pages later) with the statement: "The 'rediscovery' of Mendel's laws of heredity around the turn of the century, etc." On page 7, it is stated that wild rice, *Zizania aquatica* "was one of the most important food-stuffs of North American Indians." True, it was an important food for a few tribes in northern Minnesota where conditions are suitable for its culture. But to imply its use was wide-spread among North American Indians is completely misleading.

I doubt that those familiar with the taxonomy and systematics of maize would agree with the statement on page 146, "Maize, *Zea mays* is closely related to millet." Since this is an undocumented assertion it is difficult to guess what millet the author or the translator had in mind. These are samples of the errors that could be corrected should the popularity of the book call for a reprinting or a new edition.

It is apparent that the translator is not at home with agricultural terms and practices. Unfamiliarity has led to a number of awkward statements and phrases, and several redundancies. Under Literature about 20 general works are cited, none more recent than 1955. An index of about $4\frac{1}{4}$ pages, with a few minor errors, completes the book.—THOMAS W. WHITAKER, United States Department of Agriculture, Agricultural Research Service, La Jolla, California.